

REMARKS

The Examiner relied on U.S. Patent No. 6,479,597, the Long reference, in the prosecution of the parent application (Serial No. 09/705,315, filed November 3, 2000). In anticipation of the Examiner's reliance on the Long reference in this continuation, the Applicant submits a Declaration under 37 C.F.R. § 1.131 to remove the Long reference as prior art.

The Effective Date of the Long Reference is July 28, 2000

Initially, Applicant contends that the effective date of the Long reference is the later non-provisional filing date (July 28, 2000) and not the earlier provisional filing date (July 30, 1999). This is so because the non-provisional application was filed with new matter and new claims. The new claims added in the non-provisional application were not supported by the earlier provisional application. Thus, the effective date of the Long reference as prior art is the non-provisional filing date. *See In re Wertheim*, 209 U.S.P.Q. 554, 564 (C.C.P.A. 1981) (holding that if subject matter set forth in the claims of the reference do not contain appropriate support in the earlier related application, the effective date of the reference is the actual filing date, which is the filing date of the application having the appropriate support).

The Long provisional application, filed on July 30, 1999, is solely directed to the use of Raman spectroscopy in the polymerization of the olefin *propylene* to *polypropylene*. *See* Exhibit 1, which is a true and correct copy of the Long provisional application. In the later non-provisional application, filed on July 28, 2000, information regarding the use of Raman

spectroscopy in the polymerization of the olefin *ethylene* to *polyethylene* was added to the originally disclosed subject matter. See Exhibit 2, which is a true and correct copy of the Long non-provisional application (specifically Figs. 10-16 and associated text). Because the new claims added to the Long non-provisional application were directed to the new matter regarding polyethylene production, the effective date of the Long reference as prior art, as explained below, can be no earlier than July 28, 2000.

In general, a continuation-in-part application, i.e., an application containing new matter, such as the Long non-provisional application filed on July 28, 2000, is entitled to the filing date of the parent application as to all subject matter carried over into it from the parent application, whether for purposes of obtaining a patent or subsequently utilizing the patent disclosure as evidence to defeat another's right to a patent. *In re Lund*, 153 U.S.P.Q. 625, 630-31 (C.C.P.A. 1967). In *In re Wertheim*, 209 U.S.P.Q. 554 (C.C.P.A. 1981), the question arose as to how far back can one extend the effective date of a reference patent as "prior art" in a case where the patent reference is used in a rejection under 35 U.S.C. §§ 102(e)/103. *Id.* at 561. Even more specifically, the C.C.P.A. answered the following question: "What patent disclosure, or portion thereof, which has been 'carried over' through a chain of applications, may be traced back to an earlier application and given its effective date...to reject later filed claims under §§ 102(e)/103?" *Id.* at 561-62.

In answering this question, the *Wertheim* court recognized that Supreme Court precedent expressed the rationale behind treating U.S. applications as prior art as of their

filing date under Section 102(e). The Supreme Court stated that but for the delay imposed by the Patent Office in processing the application, the disclosure would become public as of the filing date. *See Id.* 559-61 (citing *Alexander Milburn Co. v. Davis-Bournonville Co.*, 270 U.S. 390 (1926) and *Hazeltine Research, Inc. v. Brenner*, 382 U.S. 252 (1965)). The C.C.P.A. extended this reasoning to a continuation-in-part application. Because a continuation-in-part application adds new matter to the previously filed parent application, the type of new matter added must be inquired into to determine whether it is critical to the patentability of the claimed invention. *Id.* at 563. If the new matter is critical to the patentability of the claimed invention, a patent could not have issued on the earlier filed application, so the theory of patent office delay has no application for the earlier filed application. *Id.* If the PTO wishes to utilize against an applicant a part of a patent disclosure found in an application filed earlier than the date of the application which became the patent, it must demonstrate that the earlier-filed application contains support under 35 U.S.C. §§ 112 and 120 for the invention claimed in the reference patent. *Id.* at 564. “For if a patent could not theoretically have issued the day the application was filed, it is not entitled to be used against another.” *Id.* Thus, if the subject matter set forth *in any of the claims* of the reference patent do not contain appropriate support under 35 U.S.C. §§ 112 and 120, the effective date of the reference is its actual filing date, not the filing date of an earlier related application. *Id.* at 565.

Here, at least claims 16, 17, and 19 of the Long reference were added in the later non-provisional application filed July 28, 2000 and are directed to the use of Raman spectroscopy

in the polymerization of ethylene to polyethylene. Specifically, claims 16 and 17 are directed to Raman measurement of ethylene concentration, and claim 17 is also directed to Raman measurement of an alpha-olefin (e.g. hexene), a comonomer typically used in polyethylene production and not polypropylene production. Claim 19 is directed to Raman measurement of diluent concentration, a reactor component commonly used in polyethylene production but not in polypropylene production. Because the Long reference contains claims that are only supported by the new matter introduced in the non-provisional application filed on July 28, 2000, the effective date of the Long reference as prior art *must* be July 28, 2000.

Removal of the Long Reference Under 37 C.F.R. § 1.131

As mentioned, the Examiner relied on the Long reference in the prosecution of the parent application of the present continuation. In view of the earlier date of invention of the subject matter disclosed and claimed in the present application, however, Applicant has chosen to remove the Long reference pursuant to 37 C.F.R. § 1.131. Under Rule 131, an applicant may overcome a prior art rejection by filing an appropriate declaration that establishes invention of the claimed subject matter by the applicant prior to the effective date of the reference relied upon in the rejection. Prior invention may be shown either by proving an actual reduction to practice prior to the effective date of the reference (here July 28, 2000, as discussed above), or by proving conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the effective date of the reference to either an actual or constructive reduction to practice.

Here, the present claims are generally directed to polymerization in a reactor of at least one olefin monomer with a catalyst system to make a polyolefin. The reaction is monitored by using Raman spectrometry equipment to provide an output signal representative, for example, of the concentration of one or more chemical components of the reaction. In response to the measured concentrations, polymerization conditions may be adjusted.

The Applicant has attached a Declaration signed by the Applicant, the sole inventor of record, which demonstrates that the invention disclosed and claimed in the present application was actually reduced to practice before July 28, 2000, the non-provisional filing date and the effective date of the Long reference. *See* Exhibit 3. In paragraphs 3 and 4 of the attached Declaration, Applicant Battiste states that he conceived of the claimed subject matter at least as early as August 27, 1999 and that he actually reduced to practice the claimed subject matter at least as early as August 30, 1999. These statements are corroborated by Exhibits A and B of the Declaration.

Specifically, in Exhibit A attached to the Declaration, the laboratory notes of Applicant Battiste, dated at least as early as August 27, 1999, are entitled “Raman/Batch Scale Ethylene Polymerization” and “Raman/Bench Scale Ethylene Polymerization.” Exhibit A, pages 31-32. The express purposes of the laboratory tests were to “[t]est Raman & probes in batch reactor,” and to “[m]easure ethylene & isobutane in liquid reactor contents [with a] 12” probe.” *Id.* Applicant Battiste’s conception of the claimed subject matter is

evidenced by the testing of the Raman spectrometer in preparation of an actual reduction to practice of the claim subject matter.

In Exhibit B attached to the Declaration, the laboratory notes of Applicant Battiste, dated at least as early as August 30, 1999, are entitled, "Raman/Bench Scale Polymerization of Ethylene." Exhibit B, pages 33-35. The notes demonstrate polymerization in a reactor of olefin monomer ethylene with a catalyst system to give polyolefin product. *Id.* The reaction is monitored by using Raman spectrometry equipment to provide an output signal representative of one or more chemical components of the reaction. *Id.* For example, the concentration of ethylene in the reactor is measured with the Raman device. *Id.* at 34. Furthermore, polymerization conditions, such as the reactor temperature, reactor temperature, and the amount of comonomer hexene, are adjusted. *Id.* at 33-35.

Applicant has demonstrated that the invention disclosed and claimed in the present application was actually reduced to practice before the effective non-provisional date (July 28, 2000) of the Long reference, and thus, the Long reference should be removed pursuant to 37 C.F.R. § 1.131. Accordingly, Applicant respectfully requests that claims 1-35 be allowed.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of claims 1-35. If the Examiner believes that a telephonic interview will

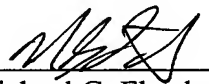
help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

General Authorization for Extensions of Time

In accordance with 37 C.F.R. § 1.136, Applicants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefore. The Commissioner is authorized to charge the appropriate fee for any extension of time to Deposit Account No. 06-1315; Order No. CPCM:0006-1 33939US01).

Respectfully submitted,

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Michael G. Fletcher
Reg. No. 32,777
Fletcher Yoder
P.O. Box 692289
Houston, Texas 77269-2289
(281) 970-4545